

teeth, and the calyx-lobes which are narrower and more gradually pointed.

VIRGINIA: Southwest slope of the Peak of Otter, Bedford County, July 1, 1925, *Rydberg 9264* (N. Y. Bot. Gard.).

Explanation of Plates

PLATE 2. 1. *Hypericum Mitchellianum* Rydb. $\times \frac{2}{3}$.—2. Calyx.—3. Petal.—4. Fascicle of stamens.—5. Pistil.—6. Fruit. $\times 2$.—7. *Hypericum graveolens* Buckley. $\times \frac{2}{3}$.—8. Calyx.—9. Petals.—10. Fascicle of stamens.—11. Pistil.—12. Young fruit. $\times 2$.

PLATE 3. 1. *Kneiffia latifolia* Rydb. $\times \frac{2}{3}$.—2. Flower with petals removed.—3. Petal and 2 stamens. *Nat. size*.—4. Fruit. $\times \frac{2}{3}$.

PLATE 4. 1. *Stachys subcordata* Rydb. $\times \frac{2}{3}$.—2, 3. Calyx.—4. Corolla.—5. Lip.—6. Stamens.—7. Pistil. $\times 2$.

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A NEW AND REMARKABLE HABITAT FOR THE ENDEMIC FLORIDA YEW.

HERMAN KURZ

Many botanists know that the Florida yew *Taxus Floridana* occurs somewhere along or in the vicinity of the Apalachicola River Bluffs. Very few, however, are able to lead straight to it, once they have arrived at the bluffs, so rare is it. *Tumion taxifolium* (stinking cedar) is well nigh ubiquitous along the bluffs. On the other hand, the yew, another endemic species of the same family, as Harper (2) points out is about 40 times as rare. Any new station for the latter is therefore in itself noteworthy.

In order to appreciate the peculiar or wanton distribution of the yew as shown by our recent discovery, a typical habitat for it $4\frac{1}{2}$ miles a little east of south of River Junction on Flat Creek will first be briefly described. Here along the creek, but well above the water table, at least a dozen plants grow in a perfectly orthodox rich, though somewhat disturbed, mesophytic forest where one can pass freely and comfortably about. The forest soil here is a well aerated, only slightly acid (pH 6), sandy loam, supporting among others *Tumion taxifolium*, *Magnolia foetida*,

Quercus laurifolia, *Fagus grandifolia*, *Pinus glabra*, *Ilex opaca*, *Symplocos tinctoria*, and *Vaccinium elliotii*.

Now to the new locality. On February 12, 1927, Dr. R. M. Harper and the writer were guided about $\frac{1}{2}$ mile into the fastness of Johnson's Juniper Swamp by Mr. L. R. Carson of Bristol. This swamp, already described and located as 8 miles south of Bristol by Harper (3) is totally unlike the Flat Creek habitat. The waterlogged, peaty substratum is highly acid (pH 4.2-4.5). Fallen logs in all stages of decay criss-cross so that exploration becomes very arduous. The luxuriant mats of a number of species of Hepaticae and Musci attest to the very humid atmosphere of this hydrophytic forest. Among the trees and shrubs, mostly evergreen, are: *Magnolia virginiana*, *Cliftonia monophylla*, *Chamaecyparis thyoides*, *Pinus taeda*, *P. elliotii*, *Taxodium imbricarium*, *Nyssa biflora*, *Persea pubescens*, and now and then on the higher accumulated peat a young *Magnolia foetida*. To our amazement in this contrasting habitat and among such strange associates, we found the supposedly very "selective" *Taxus Florida*.

This swamp projects the Florida yew's range at least ten miles farther south, significant enough when it is realized that its hitherto known distribution is within an area of only about fifteen miles along the bluffs. Of special interest is the fact that *Taxus floridana* parallels the peculiar distribution of its northern relative *Taxus canadensis* in southern Ohio and according to Tansley (5, pp. 166ff, 250) its European relative, *Taxus baccata*, in England. The latter is abundant on the chalk uplands but occurs also in acid moors. Markle (4) reports *T. canadensis* as "one of the commonest undergrowth shrubs" in a cedar swamp of Champaign county five miles south of Urbana. Very commonly *Taxus canadensis* is found in shady mesophytic habitats of canyons and even in the dunes of Michigan. Such habitats are often circumneutral or alkaline in reaction. The plant lists given for the Cedar Swamp by Dachnowski (1) and Markle indicate circumneutral peat with local acid patches. But as no hydrogen ion data are available of the peat where *T. canadensis* grows comparison with the Florida juniper swamp is impossible. The sharp distinction between the edaphic factors of the juniper swamp and all other known habitats of the Florida yew and the striking parallel shown by its other relatives

make the endemism of the former still more interesting if not more confounding.

FLORIDA STATE COLLEGE FOR WOMEN,
TALLAHASSEE, FLORIDA.

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A NEW NYSSA FROM FLORIDA

JOHN K. SMALL

With the acquisition of another species of *Nyssa* to the North American flora, the two sections of the genus are evenly balanced with three species each. For many years the ratio was two and two. Then *Nyssa acuminata* of the coastal region of Georgia was added to the *aquatica-ogeeche* group. Three decades later the main subject of this note was added to the *sylvatica-biflora* group, which brought the ratio even again. The source of this gum is the Apalachicola River delta region where so many endemic species of flowering plants are harbored. It grows in company with *Cliftonia monophylla* and *Cyrilla racemiflora*, both of which it resembles in habit of growth. It may be named and described as:

✓ *Nyssa ursina* Small, sp. nov. A shrub with much-branched stems and numerous branchlets or sometimes a small tree with a trunk a decimeter in diameter and a narrow much-branched crown: leaves numerous; blades elliptic, often narrowly so, to spatulate, 2.5-7 cm. long, coriaceous, usually rounded at the apex, entire, deep-green and somewhat shining above, much paler beneath, glabrous, at least at maturity, short-petioled: staminate racemes numerous on slender peduncles 1-2 cm. long; sepals ovate to suborbicular, about 1 mm. long, obtuse; anthers globose-ovoid to globose-reniform, nearly 1.5 mm. long, longer